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PAGE NO

IMPORTANT: Mark all packages and papers with contract and/or order numbers. DATE OF ORDER CONTRACT NO. ORDER NO. EP-W-13-028 0006 09/30/2013 ITEM NO. SUPPLIES/SERVICES QUANTITY UNIT UNIT **AMOUNT** QUANTITY ORDERED PRICE ACCEPTED (a) (d) (c) (e) **(f)** (g) Admin Office: SRRPOD US Environmental Protection Agency Ariel Rios Building 1200 Pennsylvania Avenue, N. W. Mail Code: 3805R Washington DC 20460 Period of Performance: 09/01/2013 to 08/31/2020 0001 Task Order Base Period Contract Base Period- Year 1 Period of Perfromance: 09/30/13- 08/31/14 Requisition No: PR-R8-13-00355, PR-R8-13-00397 Accounting Info: 13--T-8AL0P-303DD2-2505-0800ED00-C034-138ALPV838-001 BFY: 13 Fund: T Budget Org: 8ALOP Program (PRC): 303DD2 Budget (BOC): 2505 Job #: 0800ED00 Cost: C034 DCN - Line ID: 138ALPV838-001 Funding Flag: Partial Funded: \$75,000.00 Accounting Info: 13--TR2B-08L-303DD2-2505-A830LA00-C001 -1308LSP849-001 BFY: 13 Fund: TR2B Budget Org: 08L Program (PRC): 303DD2 Budget (BOC): 2505 Job #: A830LA00 Cost: C001 DCN - Line ID: 1308LSP849-001 Funding Flag: Partial Funded: \$40,000.00 0002 Task Order Option Period 1 Contract Base 173,471.38 Period- Year 2 Period of Perfromance: 09/01/14- 08/31/15 (Option Line Item) 09/01/2014 0003 Task Order Option Period 2 Contract Base 177,481.38 Period- Year 3 Continued ...

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IMPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER CONTRACT NO. 09/30/2013 EP-W-13-028

ORDER NO. 0006

ITEM NO.	SUPPLIES/SERVICES	QUANTITY		UNIT PRICE	AMOUNT	QUANTITY
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04	Task Order Option Period 3 Contract Option Period 1- Year 4 Period of Perfromance: 09/01/16- 08/31/17 (Option Line Item) 09/01/2016			e .	181,741.38	
05	Task Order Option Period 4 Contract Option Period 1- Year 5 Period of Perfromance: 09/01/17- 08/31/18 (Option Line Item) 09/01/2017				185,751.38	
06	Task Order Award Term 1 Contract Award Term 1- Year 6 Period of Perfromance: 09/01/18- 08/31/19 (Option Line Item) 09/01/2018		The state of the s		190,591.38	
07	Task Order Award Term 2 Contract Award Term 1- Year 7 Period of Perfromance: 09/01/19- 08/31/20 (Option Line Item) 09/01/2019				195,391.38	
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Task Order 6: Risk Assessment Support

EPA Contract No. EPW-13-028

Performance Period: Annual Estimate for Duration of Contract Starting September 1, 2013 through August 31, 2020. Quantities specified are for each of seven one year periods within the performance period. Total quantities will be seven (7) times the quantities specified below.

TOCOR: Dan Wall

Alternate TOCOR: Wendy O'Brien

Overview: The Contractor shall support human health and ecological risk assessment activities at Region 8 Superfund sites. The Subtasks of this Task Order are:

Subtask 1 General Duties

Subtask 2 General Support

Subtask 3 Preparation and Review of Human Health Risk Assessments for Superfund

Sites

Subtask 4 Preparation and Review of Ecological Risk Assessments for Superfund Sites

Background: As part of CERCLA site investigations, EPA is required to assess the potential risks to human health and the environment from site related contamination. This is typically accomplished in the development of a risk assessment as part of a remedial investigation. Assessments of risk may also be needed as part of a monitoring program, engineering evaluation and cost analysis (EE/CA), emergency response or similar CERCLA related investigation. Further risk assessment support by the contractor may be required for document review, subject matter reports, regional policy development, presentation materials and literature searches.

Purpose: The contractor will provide human health risk assessment support for no more than 5 Superfund sites with three, 3-day trips. The contractor will provide ecological risk assessment support on no more than 5 Superfund sites with an anticipated four, 3-day trips.

All work products shall comply with all quality assurance requirements specified in EPA Requirements for Quality Assurance Project Plans (DA/R-5) and the Region 8 Environmental Assistance Team's Quality Management Plan for contract EPW-13-028.

Subtask 1 General Duties

The Contractor shall:

- 1. Perform general contract management functions associated with this Task Order.
- 2. Conduct specific activities and produce specific deliverables as directed by a Technical Direction Form (TDF) issued by the TOCOR.
- 3. Inform the TOCOR via email within one week of receiving a TDF if the Contractor will be unable to meet the activities, deliverables and due dates specified by the TDF.
- 4. Participate as required in meetings and workgroups with the TOCOR and the TOCOR's designated technical liaisons. All professional communication between the Contractor and

- any technical liaisons (including EPA personnel) shall be conducted in the presence of, or with the authorization of, the TOCOR.
- 5. Attend conferences, trainings, and meetings at the direction of the TOCOR to obtain the certifications, skills, knowledge, and/or information required by this Task Order.
- 6. Review, develop and/or implement all Standard Operating Procedures (SOPs) required by this Task Order.
- 7. Maintain all equipment and supplies related to this Task Order.
- 8. Comply with all health and safety, environmental, waste handling, and other applicable rules and regulations established by EPA Region 8 Laboratory while performing work under this Task Order.
- 9. Maintain all files and records required by this Task Order.
- 10. Prepare and deliver monthly progress and financial reports for this Task Order to the appropriate TOCOR and Contract level COR by the 7th of each month. These reports will be specific to this Task Order.
- 11. Shall comply with all quality assurance requirements specified in EPA Requirements for Quality Assurance Project Plans (DA/R-5) and the Region 8 Environmental Assistance Team's Quality Management Plan for contract EPW-13-028.

Subtask 2 General Support

1. General Risk Assessment Support

The Contractor will provide general risk assessment support as required for the Regional risk assessment program. Examples of such support include the development or implementation of risk assessment-related Geographical Information System (GIS)-based mapping and data representation tools and applications, Monte Carlo and other risk simulation and modeling tools, as well as other applications and tools which advance the capabilities and cost effectiveness of the Regional risk assessment program.

2. Scientific Literature Research and Analysis

The Contractor will conduct research, analysis, and integration of information from the available scientific literature in such fields as toxicology, pharmacokinetics, biostatistics, hydrology, ecology, and epidemiology, and will disseminate this information to Regional risk assessment staff.

3. Public Meeting Support

The Contractor will be available to join Regional risk assessment staff members to attend public meetings, and other meetings to be determined, in order to provide support in recording, processing, analyzing, presenting, and/or developing responses to public and scientific comments and issues pertaining to risk assessment.

4. Data Information Collection/Analysis/Survey

The Contractor shall provide support related to various data information tasks such as, but not limited to

- Performance of analyses, research, and fact finding for use by Regional risk assessment staff
- Preparation of reports based on the results of requested analyses
- Design and performance of statistical analyses; summary and interpretation of statistical reports

Subtask 3 Preparation and Review of Human Health Risk Assessments for Region 8 Superfund Sites

The Contractor shall prepare and/or evaluate information and products related to the development and interpretation of human health risk assessments, such as, but not limited to nature and extent of contamination, exposure data, health data, and biomonitoring reports, as well as overall characterization of risk. The Contractor shall prepare and/or evaluate statistical analyses of data and data calculations, as well as research and review applicable regulations, guidance documents, literature, and database references. Site visits and meetings may be required to obtain the necessary information to complete the required review or assessment. The contractor will provide support on no more than 5 Superfund sites with an anticipation of three 3-day trips.

1. Review and Analysis of Existing Human Health Risk Assessments

The Contractor will provide technical review and analysis of existing human health risk assessments, or specific components of the risk assessments, to support staff decision-making on the adequacy of, and actions needed to upgrade, such risk assessments. Examples include, but are not limited to, review and analysis of

- Sampling and analysis plans
- Exposure assessments
- Toxicity evaluations (e.g., hazard identification, dose-response relationships, acute hazards)
- Health data and/or biomonitoring reports
- Characterizations of risk
- Uncertainty analyses.

Such reviews will be performed in accordance with general guidance provided by Regional risk assessment staff, and will consider conformance to Headquarters and Regional risk assessment guidance, adherence to generally accepted risk assessment principles and practices in areas not directly covered by guidance, general technical merit, soundness of design, and execution of site-specific studies, residual data gaps or weaknesses, and the appropriateness and defensibility of risk assessment results and conclusions. The Contractor will also be responsible for advising the Regional risk assessment staff concerning collection of additional data and information to address the data gaps and/or weaknesses, and also for suggesting the most cost- and time-effective approaches to obtain such additional data and information.

2. Support for Preparation of Site-specific Human Health Risk Assessments

The Contractor shall perform the necessary analysis, validation, integration, and interpretation of site-specific technical data to support development of draft risk assessments, or elements of risk assessments, being prepared and managed by Regional risk assessment staff. Examples include, but are not limited to, development of

- Data quality objectives
- Sampling and analysis plans
- Exposure assessments
- Toxicity evaluations (e.g., hazard identification, dose-response relationships, acute hazards)
- Health data and/or biomonitoring reports
- Risk characterization
- Uncertainty analyses.

Development of draft risk assessments, or elements of risk assessments, will be performed in accordance with general guidance provided by Regional risk assessment staff (e.g., Headquarters or Regional risk assessment guidance), and adhere to generally accepted risk assessment principles and practices in areas not directly covered by guidance. The Contractor shall be responsible for accumulating, organizing, assembling, and integrating site-specific materials necessary to support development of the risk assessment (or elements of the risk assessment). The Contractor shall use the materials to develop draft risk assessments or elements of risk assessments for review and editing by the Regional risk assessment staff. The Contractor shall also be responsible for 1) identifying data gaps; 2) advising the Regional risk assessment staff concerning collection of additional data and information to address the data gaps; and 3) suggesting the most cost- and time-effective approaches to obtain such additional data and information.

Subtask 4 Preparation and Review of Ecological Risk Assessments (ERAs) for Region 8 Superfund Sites

In accordance with Task Area IVa of the Contract Statement of Work, the Contractor shall provide Risk Assessment Support to no more than 5 Superfund Sites. The Contractor shall prepare and/or review ecological, biological, data and risk assessments. The Contractor shall research and review applicable regulations, guidance documents, data calculations, species-specific toxicity reference values, literature, and database references, as well as statistical analyses of data. Site visits and meetings may be required to obtain the necessary information to complete the required review or assessment. EPA estimates travel will not exceed 4 three-day trips to locations outside Colorado.

Ecological risk assessment development will follow Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessments - Interim Final. The general process and requirements are described below.

1. Screening Level Problem Formulation and Ecological Effects Evaluation

The contractor shall develop a screening level problem formulation and ecological effects evaluation using existing data. The following information will be developed:

- a) Description of the environmental setting, including habitat types, observed species and species likely to be present based on habitat types documented, identification of indicator species, and threatened, rare, and endangered species;
- b) Description of contaminants known or suspected to exist at the site and the maximum concentrations present in each medium;
- c) Contaminant fate and transport mechanisms that might exist;
- d) Mechanisms of ecotoxicity associated with contaminants and categories of receptors that may be affected;
- e) Complete exposure pathways that might exist; and
- f) Screening ecotoxicity values equivalent to chronic No Observable Adverse Effects Levels (NOAELs) based on conservative assumptions.
- 2. Screening Level Exposure Estimate and Risk Calculations
 Using conservative assumptions, the contractor shall develop a preliminary exposure estimate and risk calculations. These calculations will inform EPA whether further assessment is warranted.
 - 3. Baseline Problem Formulation

Working with EPA and site stakeholders, the contractor shall develop the baseline problem formulation by:

- a) Refining preliminary contaminants of ecological concern
- b) Refining conservative exposure assumptions
- c) Further characterizing ecological effects of contaminants
- d) Refining fate and transport modeling, complete exposure pathways and ecosystems at risk
- e) Selecting assessment endpoints
- f) Developing a conceptual model with working hypothesis
- g) Identifying data gaps
- 4. Study Design and Data Quality Objective Process

The contractor shall establish measurement endpoints and complete the conceptual model which will be used as the basis to develop the study design and data quality objectives (DQOs). The end products will be a Work Plan (WP) and the Sampling and Analysis Plan (SAP). The WP documents the decisions and evaluations made during problem formulation and identifies additional tasks needed to fully evaluate the risks to ecological resources.

The WP includes, but is not limited to: site setting, summary, analysis and conclusions of previous investigations, exposure pathways selected, assessment endpoints, testable hypothesis, identification of data needs and assumptions and uncertainties.

The SAP provides a detailed description of sampling and data-gathering procedures, as well as a description of the steps required to achieve the study objectives. The SAP includes but is not

limited to: Sample type and location, timing and frequency of sampling, necessary equipment and operating procedures, sample handling and analysis and quality assurance project plan following the Uniform Federal Policy for Quality Assurance Project Plans (EPA-505-B-04-900A).

5. Verification of Field Sampling Design

In this step, the contractor shall verify the implementability of the WP and SAP and possibly develop contingency plans in the event of changed site conditions.

6. Site Investigation and Data Analysis

If required, the contractor shall assume responsibilities for implementation of the WP and SAP. Data collected during the site investigation will be used to characterize ecological exposure and effects. The contractor may characterize ecological effects by performing an exposure/response analysis, relating assessment endpoints to measurement endpoints, evaluating the evidence of causality or other similar analysis.

7. Risk Characterization

The contractor shall integrate the results of the exposure profile and exposure-effects information (or stressor-response analysis) as part of risk characterization. This will involve two major components, risk estimation and risk description. Risk estimation involves integrating exposure profiles with the exposure-effects information and summarizing the associated uncertainties. Risk descriptions provide information important for interpreting the risk results and a threshold for adverse effects on the assessment endpoints. Uncertainties inherent in the risk analysis will be described.

The following additional terms and conditions are requirements of this task order:

CONTRACTING OFFICER'S REPRESENTATIVES

The individuals listed below are authorized representatives of the Contracting Officer for this task order. These individuals may issue perform Contracting Officer Representative (COR) functions as described in the contract clauses *Technical Direction* (EPAAR 1552.237-71) and *Authorized Representative of the Contract-Level COR* (EPA-G-42-102).

Name. RoleDan WallTask Order CORWendy O'brienAlternate Task Order COR

OPTION PERIODS

This task order contains option periods that the Government may exercise via unilateral task order modification by providing written notification to the contractor of its intent to exercise the option period at least 60 days in advance of the end of the current effective period. Providing this written notice does not commit the Government to exercise the option. If the Government failed to provide written notice within that time, the Government may exercise the option via bilateral task order modification. Task order option periods may only be exercised within the effective period of the contract. If a contract-level option period is not exercised, task order option periods may not be exercised beyond the final date of the contract period of performance.

The period of performance of this task order, inclusive of all option periods is:

Base Period September 1, 2013 – August 31, 2014
Option Period 1 September 1, 2014 – August 31, 2015
Option Period 2 September 1, 2015 – August 31, 2016
Option Period 3 September 1, 2016 – August 31, 2017
Option Period 4 September 1, 2017 – August 31, 2018
Award Term 1 September 1, 2018 – August 31, 2019
Award Term 2 September 1, 2019 – August 31, 2020

OUALITY ASSURANCE

Performance under this task order requires the contractor to prepare a Quality Assurance Project Plan (QAPP) to be included as part of the task order. The contractor shall submit a QAPP with its task order proposal in accordance with EPA Requirements for Quality Assurance Project Plans (QA/R-5) found here: http://www.epa.gov/QUALITY/qs-docs/r5-final.pdf. The contractor's QAPP must be approved by the Task Order Contracting Officer's Representative (TOCOR) and Quality Assurance Manager before task order award. After task order award, the contractor shall perform all tasks under this task order in accordance with the quality standards established in the QAPP.

TRAVEL

Performance under this task order may require travel. The contractor shall submit requests for travel in accordance with the contract clause *Approval of Contractor Travel* (EPA-H-31-104). Approval of task order proposals that include travel as a materials cost shall not be construed to mean the travel is approved. Separate approval for contractor travel shall be obtained from the Contract-Level COR.

TRAINING

Performance under this task order may require unique training that is allowable as a direct cost to the task order. The contractor shall submit requests for such training in accordance with the contract clause *Approval of Training* (EPA-H-31-105). Approval of task order proposals that include training as a materials cost shall not be construed to mean the training is approved. Separate approval for Contractor training shall be obtained from the Contract-Level COR.

CONTRACTOR-ACOUIRED PROPERTY

Performance under this task order may require the contractor to acquire items that meet the definition of property. In accordance with the contract, the contractor shall not fabricate or acquire, on behalf of the Government, either directly or indirectly through a subcontract, any item of property without prior written approval from the Contracting Officer. For purposes of this task order, written approval shall be sought only for items that are considered to be "accountable personal property" defined in Section 3.2 of the EPA Personal Property Policy & Procedures Manual (FMSD 4832) found at http://intranet.epa.gov/ohr/rmpolicy/ads/manuals/pp-policy-procedures-manual.pdf as:

- personal property with an acquisition cost of \$5,000 or more;
- all leased personal property (regardless of dollar value); and
- all "sensitive items" (regardless of dollar value). "Sensitive items" are personal property items that may be converted to private use or have a high potential for theft, such as: laptops, projectors, cell phones, cameras, GPS units, electronic meters, and other technical equipment.

Approval of task order proposals that include items considered to be accountable personal property as a materials cost shall not be construed to mean the items are approved. If the Contracting Officer authorizes the contractor to procure contractor-acquired property (CAP) under this task order, the contractor shall deliver the item(s) as a deliverable under this task order. The Government may decide to provide the property back to the contractor as government-furnished property.

VEHICLE USAGE

Performance under this task order may require the contractor to use motor vehicles. In deciding how to obtain vehicle services, the contractor shall follow the order of precedence and acquisition considerations in the contract clause *Motor Vehicle Usage (ESAT)* (CO Added).